In the claims:

All claims in the application are indicated below.

1. (Currently amended) A method for recording a stereoscopic image of a wide field of view, ~~up to a complete sphere,~~ including the steps of:

~~i.~~ aligning at least two line scan devices within the field of view such that their optical axes are in ~~the same~~ a common plane, separated, approximately parallel, and pointed in the same direction;

~~ii.~~ rotating said line scan devices simultaneously about an axis of rotation, the axis of rotation being approximately perpendicular to said plane and disposed equidistant to and between said line scan devices, said rotation being at the rate of at least 500 rpm;

~~iii.~~ sampling the output of said line scan devices at least 1000 times each during said rotation, to produce scans from each sensor; ~~and~~

~~iv.~~ processing said scans so as to assemble a composite image having stereoscopic separation ~~thoughout~~ throughout the image; and

adjusting the convergence of the stereoscopic image by digital delays of the scans according to distance between the line scan devices and an object in the field of view.

2. (Original) ~~The method of claim 1, with the additional steps of~~

A method for recording a stereoscopic image of a wide field of view, including the steps of:

aligning at least two line scan devices within the field of view such that their optical axes are in a common plane, separated, approximately parallel, and pointed in the same direction;

rotating said line scan devices simultaneously about an axis of rotation, the axis of rotation being approximately perpendicular to said plane and disposed equidistant to and between said line scan devices, said rotation being at the rate of at least 500 rpm;

sampling the output of said line scan devices at least 1000 times each during said rotation, to produce scans from each sensor;

processing said scans so as to assemble a composite image having stereoscopic separation throughout the image; and

placing duplicates of said line scan devices in rotated positions around said optical axis, and adjusting the timing of the recording of the additional scans produced by said duplicates so that they appear interleaved with the scans produced by the original line scan sensors.

3. (Cancelled) The method of claim 1, with the additional step of adjusting the convergence of the stereoscopic image by digital delays of the scans.

4. (New) The method of claim 1 in which two of the at least two line scan devices are positioned in a rotating drum with their optical axes extending through the drum substantially at opposed tangential regions of the drum.

5. (New) The method of claim 1 in which the at least two line scan devices are positioned in a rotating with drum their optical axes extending through respective lenses that are also positioned within the drum.

6. (New) The method of claim 1 in which the at least two line scan devices are positioned in a rotating drum and the method further includes applying an aerodynamic lift to rotating drum.

7. (New) The method of claim 1 in which recording a stereoscopic image of a wide field of view includes recording a stereoscopic image of a field of view of substantially a complete sphere.

8. (New) A method for recording a stereoscopic image of a wide field of view, including the steps of:

aligning at least two line scan devices within the field of view such that their optical axes are in the same plane, separated, approximately parallel, and pointed in the same direction;

rotating said line scan devices simultaneously about an axis of rotation, the axis of rotation being approximately perpendicular to said plane and between said line scan devices;

sampling the output of said line scan devices during said rotation to produce plural scans from each sensor during each rotation;

processing said scans so as to assemble a composite image having stereoscopic separation throughout the image; and

adjusting the convergence of the stereoscopic image by digital delays of the scans according to distance between the line scan devices and an object in the field of view.

9. (New) The method of claim 8, with the additional steps of placing duplicates of said line scan devices in rotated positions around said optical axis, and adjusting the timing of the recording of the additional scans produced by said duplicates so that they appear interleaved with the scans produced by the original line scan sensors.

10. (New) The method of claim 8 in which two of the at least two line scan devices are positioned in a rotating drum with their optical axes extending through the drum substantially at opposed tangential regions of the drum.

11. (New) The method of claim 8 in which the at least two line scan devices are positioned in a rotating drum with their optical axes extending through respective lenses that are also positioned within the drum.

12. (New) The method of claim 8 in which the at least two line scan devices are positioned in a rotating drum and the method further includes applying an aerodynamic lift to rotating drum.

13. (New) A rotating scan camera for recording a stereoscopic image of a wide field of view, comprising:

at least two line scan devices within the field of view such that their optical axes are in a common plane, separated, approximately parallel, and pointed in the same direction;

a rotating drum containing the line scan devices and rotating them simultaneously about an axis of rotation, the axis of rotation being approximately perpendicular to said plane and between said line scan devices;

means for sampling the output of said line scan devices during said rotation to produce plural scans from each sensor during each rotation and for processing said scans so as to assemble a composite image having stereoscopic separation throughout the image; and

means for adjusting the convergence of the stereoscopic image by digital delays of the scans according to distance between the camera and an object in the field of view.

14. (New) The camera of claim 13, further including a rangefinder for determining the distance between the camera and an object in the field of view.

15. (New) The camera of claim 13, further including duplicates of said line scan devices in rotated positions around said optical axis, and means for adjusting the timing of the recording of the additional scans produced by said duplicates so that they appear interleaved with the scans produced by the original line scan sensors.

16. (New) The camera of claim 13 in which two of the at least two line scan devices are positioned in a rotating drum with their optical axes extending through the drum substantially at opposed tangential regions of the drum.

17. (New) The camera of claim 13 in which the at least two line scan devices are positioned in a rotating drum with their optical axes extending through respective lenses that are also positioned within the drum.

18. (New) The camera of claim 13 in which the at least two line scan devices are positioned in a rotating drum and the camera further includes an aerodynamic elements for applying an aerodynamic lift to camera.

19. (New) The camera of claim 13 further including a digital recorder for recording the plural scans from each sensor.

20. (New) The camera of claim 13 further including a film recorder for recording on film the plural scans from each sensor.